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# Amateur Radio

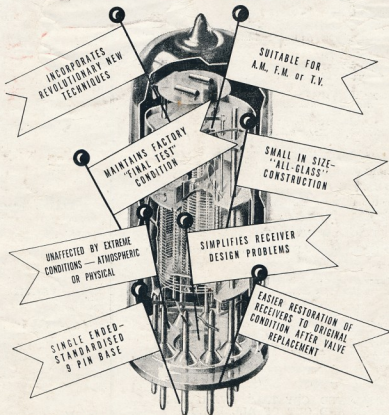
JOURNAL OF  
THE WIRELESS  
INSTITUTE OF  
AUSTRALIA

For the Experimenter  
and Radio Enthusiast



9<sub>D.</sub>

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# AMATEUR RADIO

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## EDITORIAL



## A.O.C.P. Examination by the Quiz Method?

The introduction in New Zealand of the "quiz" type of examination for candidates sitting for the Amateur Operator's Certificate of Proficiency is, in the opinion of those who have investigated it, a very fair system by which to judge a candidate's ability and knowledge of his subjects. As many of us know, the system was used to advantage in the Services and has also found favour in Educational Departments, both in this country and abroad.

The system, correctly designed and operated, not only conveys to the examiner the information he requires regarding a candidate's knowledge, but it substantially reduces the amount of correcting work involved in a written examination, and quickly indicates whether a candidate really knows his work even if he is unable to put it on paper in precise words.

Years ago when the science of wireless communication was in its infancy compared to the present high standard, a number of questions with two or three alternative questions was deemed sufficient to gauge a candidate's knowledge. But today the old system is inadequate to cover the phases of the art, included in the standard required for the A.O.C.P. Some candidates who, by circumstances of learning, happened to have studied closely the few subjects chosen by the examiner, fail despite a wider knowledge, because they concentrated their studies on subject matter not included in the examiner's questions.

In seven questions it is obviously impossible to cover the knowledge required by the candidate. From the candidate's point of view it is just as difficult for him to keep in his mind the full range of knowledge of transmission and reception as is required of him to sit for the A.O.C.P. Why then should he not have the opportunity to bring to his mind under the beneficial "quiz" method the correct answer to a given question? If he knows his work he will answer correctly. If he doesn't know his work he will answer incorrectly or he will guess. He may guess right—he may guess wrong—but the system correctly presented will leave little doubt in the mind of the examiner concerning the ability or otherwise of the candidate before him.

It is not intended to infer that A.O.C.P. candidates should be examined more sternly, but rather more justly; that the examination be such that he can convey to the examiner a more complete picture of the scope of his knowledge rather than be confined to a minority of questions which, circumstantially, may fail him despite his wider knowledge whilst another will pass, with less knowledge, the same questions.

Federal Executive has been instructed by Federal Council to press for the introduction of the system in Australia. To us the advantages are so readily apparent we are hopeful the system will find favour in official circles as it has done in New Zealand.

FEDERAL EXECUTIVE.

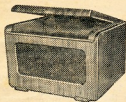
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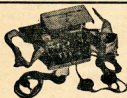
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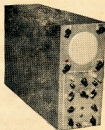
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# HOW MUCH "C"?

BY R. M. WINCH\*, VK2OA

How many capacitors have you taken out of disposals equipment and put on one side because you did not know their size? How many moulded mica capacitors with the markings rubbed off are there in your junk box? Are you wondering whether that little tuning capacitor is 100 pF., or perhaps only 75 pF.?

In other words, how often have you asked yourself, "How much C?" Practically every piece of equipment you have built, and will build, contains as many, if not more, capacitors as resistors and accuracy of C is just as important as accuracy of R. An ohm meter is regarded as an essential in every shack, yet C is guessed at or the manufacturer's markings are relied upon implicitly, merely because no means are at hand to make a measurement of C. Nevertheless, C is not very hard to measure.

There are several ways of measuring capacitance. It can be measured by applying a known voltage of a known frequency and measuring the resultant current flow. This actually measures the impedance of the capacitor, but for all practical purposes the accuracy is good enough. The disadvantages of this method make it unsuitable for general use in the Ham shack. Another method which gives good measurement accuracy is the bridge. However, a reasonably accurate capacitance bridge is quite an item of equipment in any man's language.

There is another method of measuring capacitance which can be made to give very good results with a minimum of gear and not much work. By connecting the unknown capacitor across a known inductor and measuring the resonant frequency of the combination with a grid dip meter, the value of the capacitor may be derived from a comparatively simple formula.

If you have not already built yourself a grid dip meter which has a wide range and is fairly accurately calibrated it is time you did so. You will have no idea just how useful an instrument it is until you have built—and used one.

However, the simple LC circuit shown in Fig. 1 is not very suitable for measuring a wide range of capacitance. With

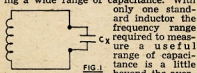


FIG. 1

only one standard inductor the frequency range required to measure a useful range of capacitance is a little beyond the average grid dip meter. A simple calculation will show that a range of 10 pF. to 0.1 uF. would require a frequency range of 100 to 1. Again, it is necessary to know the inductance of our standard inductor rather accurately. We also need

to know the self-capacitance of our standard inductor. These disadvantages can be overcome by a small re-arrangement of the circuit. Firstly, the low frequency end of our measuring range can be brought within practical limits by using a known capacitor in series with the capacitor under test. This limits the maximum amount of capacitance in circuit. The high frequency end can be similarly dealt with by shunting a capacitor across the standard inductor, thus setting a minimum to the amount of capacitance in circuit.

These two modifications have further advantages which are not quite so obvious. The shunt capacitor can be adjusted to any convenient fraction of the series capacitor by a frequency ratio measurement. This makes it unnecessary to know the size of the inductor. The self-capacitance of the inductor has disappeared into the shunt capacitor and may be forgotten.

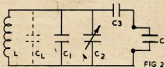


FIG. 2

Fig. 2 is the circuit of a practical unit using these principles. L is a coil of convenient size (in the author's case, the oscillator coil from a defunct F56). C1 is the self-capacitance of L, C2 is a fixed 100 pF. mica condenser, C3 is a 3-30 pF. tubular trimmer (again from disposals), Cx is 0.005 pF.  $\pm 2\frac{1}{2}\%$ , and Cx is the capacitor being measured. C1 + C2 + C3 is adjusted to equal 125 pF.

When Cx has a capacitance of infinity (short circuit) the total capacitance in circuit is 5125 pF. When Cx is zero (open circuit) the total capacitance is 125 pF. If F is the resonant frequency when Cx is infinity, F1 the resonant frequency when Cx is zero, and F2 the resonant frequency when Cx is some value intermediate between infinity and zero, then—

$$F_1 = F \sqrt{\frac{125}{5125}}$$

and

$$F_2 = F \sqrt{\frac{5125}{125 + \left( \frac{5000 \times C_x}{5000 + C_x} \right)}}$$

Since L, C1, C2, and C3 are fixed, and permanent quantities, F1 may be calculated for various values of Cx and curves plotted so that Cx may be read off directly. The value of F should be chosen to suit the ranges of your grid dip meter. In the author's case the lower limit of one range on the grid dip meter is 870 Kc. so a value of 900 Kc. was chosen for F. This makes F1 equal to 5762 Kc. and gives a useful range of from 0 pF. to 0.1 uF. with a minimum accuracy of 10%

The construction of the unit is not at all critical but a little care should be taken to make the wiring rigid. If a slug tuned inductor is used it is recommended that a locknut be placed on the slug adjusting screw so that it may be locked permanently in position after the final adjustment. In use, the normal coupling to the grid dip meter to give a discernible movement of the meter needle is necessary to obtain accurate measurements.

L and Cx are adjusted as follows: Short out the Cx terminals and adjust L so that the resonant frequency is 900 Kc. Now open circuit Cx and adjust C3 to give resonance at 5762 Kc. If the circuit will not resonate to 5762 Kc. at any setting of C3 this indicates that C1 has a value which is not close enough to 100 pF. It may be necessary to change C1 if the highest resonant frequency is lower than 5762 Kc. If the resonant frequency with C3 at maximum setting is higher than 5762 Kc. it will be necessary to change C1 or else add another small condenser in parallel with C1 to bring it closer to its normal value of 100 pF. Check again with Cx short circuited and if necessary readjust L. Re-check at 5762 Kc. and then you are ready to measure the capacitance of anything between a short piece of twine and your grandmother's false teeth.

To save wear and tear on your slide rule, a table is appended which gives:—

Col. 1—Values of Cx.

Col. 2—Corresponding values of  $125 + \left( \frac{5000 \times C_x}{5000 + C_x} \right)$  in pF.

Col. 3—Resultant resonant frequency in Kc.

Infinity	5125	900
0.1 uF.	4887	921.3
0.9 uF.	4864	924
0.06 uF.	4832	927
0.07 uF.	4791	931
0.06 uF.	4741	936
0.05 uF.	4670	943
0.04 uF.	4570	953
0.03 uF.	4411	970
0.02 uF.	4125	1003
0.01 uF.	3459	1095
0.009 uF.	3341	1115
0.008 uF.	3201	1139
0.007 uF.	3042	1168
0.006 uF.	2850	1207
0.005 uF.	2625	1257
0.004 uF.	2347	1330
0.003 uF.	2000	1440
0.002 uF.	1524	1650
0.0015 uF.	1279	1801
0.001 uF.	958	2081
900 pF.	888	2162
800 pF.	815	2256
700 pF.	739	2370
600 pF.	661	2500
500 pF.	580	2675
400 pF.	495	2896
300 pF.	408	3169
200 pF.	317	3618
150 pF.	271	3914
100 pF.	223	4314
90 pF.	213	4415
80 pF.	203.7	4514
70 pF.	194	4636
60 pF.	184.3	4745
50 pF.	174.5	4878
40 pF.	164.7	5021
30 pF.	154.8	5180
20 pF.	144.9	5350
10 pF.	135	5545
0	125	5762

\* 38 Boundary St., Parramatta, N.S.W.

# Push Pull Cascode Crystal Converter

BY C. H. CASTLE,\* VK5KL

**A**LWAYS on the look out for something better and to try anything new, we are striving for improvement each year. The author was more than satisfied with the line-up of RL37 grounded grid series plate tuned r.f., 9002 mixer, 9002 osc., and 9002 cathode follower combination of last year, but the introduction of crystal converters was very impressive and the advantages were so obvious that it was labelled as a must for the new converter and next DX season on 50 Mc.

As soon as the DX waned early in 1950, thoughts turned to designing a new front end; something that must include all the best advantages known.

## The Points strived for were:—

- ★ High Signal to Noise Ratio.
- ★ Sensitivity.
- ★ Selectivity.
- ★ Stability of Oscillator.
- ★ Accurate Frequency Calibration.
- ★ Absence of Birdies.

One fault of tuning a converter with the oscillator near the signal frequency is that a highly accurate dial is unobtainable, however by using a converter with the osc. xtal controlled, no dial is needed on the converter itself and number one bug-bear ousted.

The converter osc. being fixed, one must use the receiver the converter is fed into, as the tunable intermediate frequency. Having a BC453B Command receiver available (tuning 3 to 5 Mc.), this was ideal for the job, and by choosing a 9.4 Mc. xtal and taking off the 5th harmonic, giving 47 Mc. for the converter osc., 50 to 53 Mc. is tuned by actually tuning 3 to 6 Mc. on the Command receiver.

The dial on the Command gives both good band spread and the accurate calibrations are easily converted to read as at 50 Mc. A signal on 50.2 will be tunable at 3.2 Mc. and a signal at 50.5 at 3.5 Mc., and so on. Here we have obtained three of our wanted ideals: stability, accurate frequency calibration, and selectivity due to the double conversion.

## ABSENCE OF BIRDIES

These beats are caused in a lot of ways: Strong signals beating with your converter oscillator or the i.f. receiver oscillator, and beating at one or both i.f. frequencies; one oscillator harmonic beating with the other or even with the b.f.o. A lot can be traced to coupling of circuits via the power supply leads.

To eliminate the causes, the trouble was tackled from the start on the design board. Special condensers are used in series with all B positive and filament leads above ground. Connected as near as possible to the components and at the other end the lead goes away through the chassis. These condensers are made of pieces of brass plate 14" x 3" and have a thin sheet of mica for the dielectric to the chassis. They keep down the inductance factor, and by-pass

all r.f. getting back into the power supply, or coupling to other stages via the wiring.

Small insulating bushes were made from springback terminals. After passing through the chassis, all the filament and B positive wiring is outside of the compartments housing the r.f. components. If you still get beats, I suggest you try these series condensers, one in the B positive lead to the mixer oscillator circuit in your i.f. receiver, and also in the b.f.o. B positive lead.

## LAYOUT

The chassis is 15" x 8" x 3½", made of 18 gauge copper. Large, no doubt, for the job, but then the special condensers take up some room and it is handy to be able to work in comfort. Space has not been sacrificed for efficiency. The signal enters one end and passes straight down the centre to the output. The xtal oscillator is the only stage out of line. All leads from the condensers are of copper foil 3/16" wide as also are the earthing leads.

The xtal oscillator section is entirely shielded and the link taken through a piece of tubing into the mixer compartment. A shield is run across the chassis and mounted so that it divides the four grid connections in each RL37 and to which they are soldered. This makes the earth connections short and also shields the input from the output circuit in the r.f. stage.

A small shield was also mounted to isolate the filament r.f. chokes of the

RL37s from the 6J6 plate chokes where they run parallel to each other. All shields are of copper.

Now for the converter itself. Several months' work has gone into the design, layout and testing of each stage for maximum performance.

## CRYSTAL OSCILLATOR

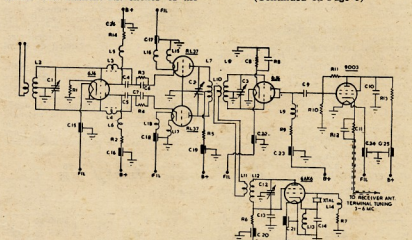
The circuit used is a 6AK6 tritet. After several weeks of testing harmonic oscillators of different varieties, this was chosen because of most reliability. Once output is obtained at 47 Mc., the circuit constants were varied until maximum output was obtained with the least plate voltage. The L to C ratios are the important factor. The output is link coupled to the mixer by a small two-turn link at the centre of the mixer coil and by a one-turn at the cold end of the oscillator plate coil.

## MIXER

Tube chosen is the 6J6 because of the good signal to noise ratio obtained by using a push pull input to the grids and parallel plate output. This also tends to cancel out oscillator conversion noises, etc.

It is coupled to the cathode follower by a 1600 Kc. i.f. transformer which has had the padder condensers taken off and the two windings connected in series. This will then resonate around 4 Mc. and when placed in the circuit is broad enough to pass signals from 3 to 6 Mc.

(Continued on Page 6)



- C1, 2, 3—15 pF. butterfly.  
C4, 5—50 pF. silver mica.  
C6, 7—0.001 uF. sil. mica.  
C8, 10—0.0005 uF. mica.  
C9—0.0001 uF. mica.  
C11—0.001 uF. mica.  
C12—8 pF. butterfly.  
C13—0.01 uF. mica.  
C14—3-30 pF. trimmer.  
C15 to C26—Special condensers, see text.  
R1—60 ohms.

- R2, 5, 9, 12, 13, 14—1,000 ohms.  
R3, 4—130 ohms.  
R6—250 ohms.  
R7—50,000 ohms.  
R8—450 ohms.  
R10—5,000 ohms.  
R11—2,000 ohms.  
L1—2 turns.  
L2, 7, 8—12 turns, ¼" dia. inside, 16 gauge.  
L3, 4—24 turns, ¼" dia. slug tuned.

- L5, 6—18 turns, ¼" dia., 18 gauge.  
L9—Revamped 1,600 Kc. i.f. see text.  
L10, 11—2 turn link.  
L12—11 turns, ¼" dia. inside, 16 gauge.  
L13—24 turns, ¼" dia. slug tuned.  
L14—2.5 mH. RFC.  
L15, 16, 17, 18—24 g. wire wound full length on 1 meg. 1 w. resistors.

\*Rose Terrace, Wayville, South Aus.

# Army VT Numbers and Commercial Numbers

VT No.	Commercial No.	VT No.	Commercial No.	VT No.	Commercial No.	VT No.	Commercial No.	VT No.	Commercial No.
VT1	WE203A*	VT60	859	VT108	4507TH	VT159	Spec. Tube	VT217	811
VT2	WE 203B	VT62	801, 801A	VT109	2051	VT160	Spec. Tube	VT218	100TH
VT3	*	VT63	46	VT111	5BP4/1802P4	VT161	12SA7	VT219	*
VT4A	*	VT64	800	VT112	6AC7/1852	VT162	12SJ7	VT220	250TH
VT4B	211	VT65	6C5	VT114	5T4	VT163	6C8G	VT221	3Q5GT
VT4C	JAN 211	VT65A	6C5G	VT115	6L6	VT164	1619	VT222	884
VT5	WE215A	VT66	6F6	VT115A	6L6G	VT165	1624	VT223	223
VT6	212A*	VT66A	6F6G	VT116	6SJ7	VT166	371A	VT224	RK34
VT7	WX12*	VT67	30 Spec.	VT116A	6S7GT	VT167	6K8	VT225	307A
VT8	UV204*	VT68	6B7	VT116B	6S7Y	VT167A	6K8G	VT226	3EP1/1806P1
VT10	*	VT69	6D6	VT117	6SK7	VT168A	6V6G	VT227	7184
VT11	*	VT70	6F7	VT117A	6SK7GT	VT169	12C8	VT228	8012
VT12	*	VT72	842	VT118	832	VT170	1E5GP	VT229	6SL7GT
VT13	*	VT73	843	VT119	2X2/879	VT171	1R5	VT230	350A
VT14	*	VT74	5Z4	VT120	954	VT171A	1R5 (loctal)	VT231	6SN7GT
VT16	*	VT75	75	VT121	955	VT172	1S5	VT232	IE148
VT17	860	VT76	76	VT122	530	VT173	1T4	VT233	6SB7
VT18	*	VT77	77	VT123	RCA A5586	VT174	3S4	VT234	HY114B
VT19	861	VT78	78	superceded by VT128		VT175	1613	VT235	HY615
VT20	*	VT80	80	VT124	1A5GT	VT176	6AB7/1853	VT236	836
VT21	*	VT83	83	VT125	1C5GT	VT177	1LH4	VT237	957
VT22	204A	VT84	84/624	VT126	6X5	VT178	1LC6	VT238	956
VT23	*	VT86	6K7	VT126A	6X5G	VT179	1LN5	VT239	1LE3
VT24	864	VT86A	6K7G	VT126B	6X5GT	VT180†	3LF4	VT240	710A
VT25	10	VT86B	6K7GT	VT127	Spec. Tube	VT180†	724	VT241	7E5/1201
VT25A	10 Spec.	VT87	6L7	VT127A	Spec. Tube	VT182	3B7/1291	VT243	7C4/1203A
VT26	22	VT87A	6L7G	VT128	1630 (A5588)	VT183	1R4/1294	VT244	5U4G
VT27	30	VT88	6R7	VT129	304TL	VT184	VR90/30	VT245	2050
VT28	24, 24A	VT88A	6R7G	VT130	250TL	VT185	3D6/1299	VT246	918
VT29	27	VT88B	6R7GT	VT131	12SK7	VT186	Spec. Tube	VT247	6AG7
VT30	01A	VT89	89	VT132	12K8 Spec.	VT187	575A	VT248	1808P1
VT31	31	VT90	6H6	VT133	12SR7	VT188	7E6	VT249	1006
VT32	*	VT90A	6H6GT	VT134	12A6	VT189	7F7	VT250	EF50
VT33	33	VT91	6J7	VT135	12J5GT	VT190	7H7	VT251	441
VT34	207	VT91	6J7GT	VT135A	12J5	VT191	316A	VT252	923
VT35	35/51	VT92	6Q7	VT136	1625	VT192	7A4	VT254	304TH
VT36	36	VT92A†	6Q7G	VT137	1626	VT193	7C7	VT255	705A
VT37	37	VT93	6B8	VT138	1629	VT194	7J7	VT256	ZP486
VT39	869	VT93A	6B8G	VT139	VR150/30	VT195	1005	VT257	K7
VT39A	869A	VT94	6J5	VT140†	1628	VT196	6WSG	VT259	829
VT40	40	VT94A	6J5G	VT141	531	VT197A	5Y3GT/G	VT260	VR75/30
VT41	851	VT94B	6J5 Spec.	VT142	WE39DY1	VT198A	6G6G	VT264	3Q4
VT42	872	VT94C	6J5G Spec.	VT143	805	VT199	6SS7	VT266	1616
VT42A	872A Spec.	VT94D	6J5GT	VT144	813	VT200	VR105/30	VT267	578
VT43	845	VT95	2A3	VT145	5Z3	VT201	25L6	VT268	12SC7
VT44	32	VT96	6N7	VT146	1N5GT	VT201C	25L6GT	VT269	717A
VT45	45	VT96B	6N7 Spec.	VT147	1A7GT	VT202	9002	VT277	417
VT46	866	VT97	5W4	VT148	1D8GT	VT203	9003	VT279	GY2
VT46A	866A	VT98	6U5/6C5	VT149	3A8GT	VT204	HK24G	VT280†	C7063
VT47	47	VT99	6F8G	VT150	6SA7	VT205	6ST7	VT281†	HY145ZT
VT48	41	VT100	807	VT150A	6SA7GT	VT206A	5V4G	VT282	ZG489
VT49	39/44	VT100A	807 Mod.	VT151	6A8G	VT207	12AH7GT	VT283†	QF206
VT50	50	VT101	837	VT151B	6A8GT	VT208	7B8	VT284†	QF197
VT51	841	VT102	Cancelled	VT152	6K6GT	VT209	12SG7	VT285†	QF200C
VT52	45 Spec.	VT103	6SQ7	VT152A	6K6G	VT210	1S4	VT286	832A
VT53	(VT42A)	VT104	12SQ7	VT153	12C8 Spec.	VT211	6SG7	VT287	815
VT54	34	VT105	6SC7	VT154	814	VT212	958	VT288	12SH7
VT55	865	VT106	803	VT155	Spec. Tube	VT213A	6L5G	VT289	12SL7GT
VT56	56	VT107	6V6	VT156	Spec. Tube	VT214	12H6	* Obsolete. † Indicates VT number cancelled.	
VT57	57	VT107A	6V6GT	VT157	Spec. Tube	VT215	6E5		
VT58	58	VT107B	6V6G	VT158	Spec. Tube	VT216	816		



# THE JUBILEE RELAY

The Jubilee Relay Contest will take place during the month of September and should be a further means of making known Australia's Jubilee and the Jubilee VK-ZL DX Contest to be held during October.

Australian and New Zealand contestants will endeavour to send this message to as many foreign stations as possible:—

- "Australia celebrates its Jubilee this year and invites you to join in the Jubilee VK-ZL DX Contest during October."

Australian stations will add the signature W.I.A., and New Zealand stations N.Z.A.R.T.

## RULES

1. The Contest will commence at 0001 hours G.M.T. on 1st September, 1951, and conclude at 2359 hours on 29th September, 1951.
2. Phone or c.w. may be used and all bands.
3. One point is gained for each contact and total points are obtained by multiplying total contacts by number of countries worked on each band.
4. Logs must be in the hands of the Contest Committee, Box 1734, G.P.O.,

Sydney, not later than 30th October, 1951. Logs should show: Date and time of contact, band, and station worked. A summary should be given showing final score.

5. A trophy will be awarded the highest scoring station in both Australia and New Zealand and Certificates to each District or State.

6. The decision of the W.I.A. Federal Contest Committee shall be final and binding.

7. From the above rules you will see that the Contest has been made very simple and should do much to publicise the main Contest, viz.: The Jubilee VK-ZL. Please send in your log irrespective of the number of contacts.

as strong signals at the i.f. frequency filtered through. It has been said that a grounded grid stage will perform better when driven, so much thought was given to this. Something in keeping with the 6J6 mixer was sought after.

One that seemed would do was the cascade circuit reputed to give good signal to noise ratio. But this was single ended. Wanting to keep everything symmetrical, the push pull cascade circuit as shown was developed. The plate circuit is inductively coupled to the mixer. Neutralisation of the 6J6 is obtained by using slug tuned inductances. Although not critical, when neutralised exactly the signal to noise ratio is improved.

**The Aerial Coil.**—A two-turn link at the centre of the input coil is used. At this stage two more points are gained. High signal to noise ratio and sensitivity.

In conclusion, the special condensers can be made as per page 46 "QST," September, 1948, but take a little longer to make.

The coils are best checked by a grid dip meter to set them correctly in the shortest time, especially the inductance neutralising coils.

The converter has been used on 50 Mc. during the past few months and has performed very nicely. With what has been found in practice and in light of a few articles from overseas, the full benefit of the circuit design does not show up at 50 Mc., but should be very beneficial and a great advantage at 144 Mc. It will be changed to this band later and results compared with other receivers on that band.

## CRYSTAL CONVERTER

(Continued from Page 4)

### THE CATHODE FOLLOWER

This was considered a necessary item and is excellent for changing from high impedance to low as required for the input to the Command receiver.

The resistor R11 was found to improve the output considerably.

### THE R.F. STAGE

Last year's lesson showed that the aerial fed into a grounded grid r.f. stage was broad and insensitive, in as much

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## Transformers and Reactors

With quality as the prime factor, A. & R. Products are developed to give lasting and highly satisfactory performance. We market our Transformers to satisfy the needs of the customer who buys on value and not on price.

At present the accent is again on high fidelity audio reproduction, and with the advent of a wide range disc and tape recording, together with pick-ups and speakers, better class equipment is required to fully utilise these wide range components.

Aware of these requirements, we have, for quite some time, been manufacturing wide frequency range Audio Transformers for almost every purpose. Our catalogue of Transformers and Reactors, which may be obtained on request, gives a large selection to choose from, whether the requirements be for Audio, Radio, Theatre, Domestic or Industrial use.

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TAS.: A. H. Gibson Electrical Pty. Ltd.

**A. & R. Electronic Equipment Co. Pty. Ltd.**

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Phones: MX 1159, MX 1150



# Fathers and Sons in Tragic Crash

## VK7MC and Son, Athol, Killed

It is with deep regret that we learnt that VK7MC and his son, Athol, were killed in a car accident, together with Mr. S. V. Sydes and his son, on Sunday evening, 8th July.

The four people were killed when their car plunged over the St. Paul's River Bridge at Avara and crashed on to rocks 30 feet below. They were Stanley Vale Sydes (about 41 years), Peel Street, Launceston; his son, Edward (14); Ernest Edward Canning (about 45), VK7MC, 61 Balne Ter., Trevalyn, and his son Athol (17). The accident occurred about 7 p.m. when they were returning from Launceston from Coles Bay, where they had been building a week-end shack. It is believed that the car skidded on the bridge and got out of control. It plunged over the edge of the bridge and landed upside down a few feet from the edge of the water. The car was wrecked and a small trailer being towed by the car broke loose after the impact.

The two men were killed instantly. The boys were rushed to the Launceston General Hospital but they died shortly after admission.

### RADIO OFFICIALS

Mr. Sydes was manager of radio station TLA and Mr. Cooper (VK7MC) was the chief engineer at TLA.

Mr. Sydes joined in 1930 and studied the technical branch of broadcasting. His tutor was the chief engineer (Mr. V. Brooker) and after three years he was awarded his technical certificate. When Mr. Brooker resigned as chief engineer in 1934, Mr. Sydes was given the appointment and held the position until 1945, when he was promoted to manager.

He took an active interest in the affairs of the Australian Federation of Commercial Broadcasting Stations and was secretary of the Tasmanian Branch. He was a member of the Launceston Rotary Club and assisted in the organisation of Courtesy Week held last month. He was also a former member of the Apex Club.

Mr. Sydes was a director of station TQT Queenstown. His main hobby was amateur photography. He married Miss Judith McGladery of Sydney, who was the first woman radio announcer employed by TLA.

### TECHNICAL EXPERT

Mr. Cooper was interested in all phases of radio from the time of his youth. He was employed by a Hobart firm in the mid-1920's to service radios and when the firm closed down, he moved to Launceston and went into business on his own.

His ability was recognised by the broadcasting stations and after working at THT Hobart and TQT Queenstown as a technician, he accepted the position of chief engineer at TLA.

Ern was an active 144 Mc. man in Launceston and was fairly active on 40 metre phone. He had been assisting Val Sydes in the building of a small seaside house at Coles Bay on the East Coast of Tasmania and in his spare time was building an 80/40 metre portable transmitter-receiver to take with him to this DX paradise, miles away from man-made noise.

Only the Friday before the tragedy, VK7XW was discussing with him the R.D. Contest in which he intended to take an active interest.

### T-TYPE VALVE SOCKETS

Those ex-R.N. or R.A.F. 9-pin valve sockets for EF50s and the like—they can be troublesome when stripped from ex-Service gear. Many of these sockets had been sprayed or bushied by people with a yen for "tropic proofing or bust." The result was that "goo" got all over the contact springs as well as the insulation material. Poor, or lack of contact and seized springs resulted from such treatment. The cure is to soak such sockets in lacquer thinner or Acetone, then dry out for a day or so, and all will be well, after scraping contact surfaces clean.—VK2NO.

## AMATEUR CALL SIGNS

ADDITIONS, ALTERATIONS AND DELETIONS FOR MONTH OF MAY, 1951

### ADDITIONS

VK—New South Wales  
2LR—L. J. Turner, McDougall St., Kyogle.  
2APF—F. D. A. H. Hurley, Unit 279D, Housing Board, Horns Bay.  
2APJ—A. G. Simmonds, 16 Burraneer Bay Rd., Cronulla.  
2ARM—R. J. Miller, 8 Tillock St., Haberfield.

### Victoria

3YU—R. C. Smith, Exdale St., Blackburn.  
3APL—S. L. Skinner, 8 Fontaine St., Pascoe Vale  
3ANG—N. F. Wilson, 155 Bridge St., Benalla.  
3ANL—J. Llewellyn, 12 Hall St., W. Brunswick.  
3AVG—N. R. Malt, 40 Albany Cr., Surrey Hills

### Queensland

4GG—R. J. Mitchell, Keil Mount Rd., Woombie  
4KJ—W. E. C. Sawyer, Coastal Radio Station VII, Thursday Island.

### South Australia

5MG—W. C. Caldwell (Col.), Milpo, Darwin, N.T.  
5TJ—T. J. Lally, P.O. Box 29, Clare, S.A.  
5TP—A. E. Peppercorn, 6 Leslie Ave., Blair Athol

### Western Australia

6BR—B. R. E. Field, Alexander St., St. Perth.

### Tasmania

7YH—F. W. Hand, George Town.  
7OK—M. A. O'Keefe, Hut C7, Bronte Park.

### Territories

1BS—W. J. Storer, Macquarie Island.  
9CP—Rev. C. J. Patrick, Papitala, Manus.  
9BW—W. C. Gee, Administration Senior Officers Mess, Port Moresby.

### ALTERATIONS

VK—New South Wales

2AZ—"Vauscule," Hoxton Park Rd., Liverpool.  
3IP—Lov 31, New Barrington Rd., Avalon Beach.  
2TL—5 Shadforth St., Mosman.  
2YH—188 Stafford St., Penrith.  
2ZM—27 William Rd., Herne Bay.  
2AQ—13 New St., Auburn.  
2AGY—Compton St., North Lambton.  
2AKK—5 Euston Ave., West Ryde.  
2ALD—David Avenue, Carlingbah.  
2ANR—"Kia Ora," Yass Rd., R.M.B.200, Canberra, A.C.T.  
2ANT—Aerodrome Rd., Forest Hill, via Wagga; postal address: Depart. of Civil Aviation, Box 1148, P.O. South Wagga.  
2APM—27 St. Raleigh Ave., Carlingbah.  
2AVS—34 Moate Ave., Brighton-Le-Sands.  
2AVT—Miller Rd., Villawood, Sydney.

### Victoria

3CI—High Street, Nagambie.  
3JM—180 Ascot Vale Rd., Ascot Vale.  
3OE—36 Barcelona St.  
3OQ—Theogen Crt., 52 Esplanade, Brighton, S.S.

3QG—1332a Gregory St., Ballarat.  
3RB—Vint 3, 230 Toorak Rd., South Yarra.  
3US—Koonwarra Rd., Leongatha South (Postal address: P. O. Box 126, Leongatha).

3VF—34 Vernon St., Croydon.  
3VL—Koonwarra Rd., Leongatha South (Postal address: P. O. Box 126, Leongatha).

3VY—Ellesmere Pde., Richmond.  
3XV—26 Elora Rd., South Oakleigh.  
3ZO—4 Parliament Place, East Melbourne.  
3ADA—182 Buckley St., Essendon.  
3APG—45 Marley St., Sale.  
3ATL—Rear of Congregational Church, Gheringhap St., Geelong.

### Queensland

4AJ—214 Boundary Rd., West End, Brisbane.  
4FC—Marina Parade, Ingham.  
4MG—Olive Street, Killarney.  
4RF—Coominga, Esk Line.  
4WI—C/o W. G. Dodd, 26 Paramount Ter., Morningside, Brisbane.

### South Australia

5BM—23 Miller St., North Unley.  
5NP—13 Grandview Gr., Toorak Gardens.

### Western Australia

6OU—2 St. George's Terrace, Perth.  
6LA—29 Canning Pde., Canning Bridge, W.A.  
6RG—8 Paramatta Rd., Doubleview.

### Tasmania

7SW—23 Bedford St., New Town.

### DELETIONS

VK—New South Wales  
2MX—Cancelled.  
2QJ—Cancelled, now operating under VK5TP.  
2S2—Cancelled.  
2VS—Cancelled.  
2AAS—Cancelled; now operating under VK1BS.  
2AGJ—Cancelled; now operating under VK4GQ.  
2AJB—Cancelled; now operating under VK2LR.  
2AQM—Cancelled.  
2ARD—Cancelled.

### Victoria

3HQ—Cancelled.  
3IB—Cancelled.  
3IZ—Cancelled.  
3KD—Cancelled.  
3RA—Cancelled.  
3YH—Cancelled; now operating under VK1YH.  
3ALN—Cancelled.  
3ALQ—Cancelled.

### Queensland

4FG—Cancelled.

### South Australia

5HR—Cancelled.

### Western Australia

6DD—Cancelled.  
6NW—Cancelled; now operating under VK3ANG.  
6RZ—Cancelled.

### Tasmania

7AN—Cancelled; now operating under VK9WG.  
7JP—Cancelled.  
9MR—Cancelled.

## Low Drift Crystals

FOR

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ACCURACY 0.02% OF  
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VICTORIA

# Results of the 1951 National Field Day Contest

Despite the publicity given to this Contest the number of logs received was a very poor average of the Amateurs who, from time to time, express their interest in field work. Admittedly it was a hot summer this year—which may account for the low participation figures—but it is astounding that so little interest is evidenced in what should seemingly be a most attractive out-door Ham event.

However, it is at least pleasing to note a little more interest than for the 1950 Contest, and if this can be taken as a guide, it would seem that the National Field Day Contest may yet be a real "big time" show looked forward to year after year by hundreds instead of such a minority.

## SCORES

### Open Section

Call	Conts.	Bands	Contact Pts.	Bonus Pts.	Total
VK3ADB/2	44	3	176	150	326
VK6WI/P	39	5	137	150	287
VK7SR/4	47	2	214	100	314
VK2AMV/P/4	15	3	78	100	178
VK7WI/P/2	19	2	86	25	115
VK5JG/2	2	1	20	—	20

### C.W. Section

Call	Conts.	Bands	Contact Pts.	Bonus Pts.	Total
VK4AP/P	37	2	173	175	348
VK3ADB/2	26	3	131	150	281
VK6HC/2	33	3	120	150	270
VK2AHA/5	30	2	116	125	241
VK7SR/3	19	2	91	75	166

## Phone Section

Call	Conts.	Bands	Contact Pts.	Bonus Pts.	Total
VK3LN/2	47	2	154	25	179
VK3ALQ/3	41	3	140	25	165
VK4KS/3	55	3	123	25	148
VK7SR/4	28	2	123	25	148
VK4RL	25	2	89	50	139
VK7AX/5	43	2	133	—	133
VK3ADB/2	23	3	69	50	119

Check logs were received from VK5RR and VK5BJ, and Eric Trebilcock BERS 195.

The description of equipment used by each competitor makes very interesting reading, but unfortunately it is impossible to print the details here. The equipment used by the winner in each section is as follows:—

**Open**—VK3ADB took the honours in this section, and is also to be commended on gaining second place in the c.w. section. VK3ADB is the portable call of J. G. DuFaur, VK3ADF, who was ably assisted by J. R. Richardson, VK3ZP.

The portable station was located at the top of Mt. Eliza—approximately five miles from Frankston—and used a Type 3 Mk. II on the 20, 40 and 80 metre bands, plate modulated with an external home-built modulator using a 6N7 in the output stage supplying 10 watts of audio power from a carbon microphone.

The power input to the final with the antenna connected was 20-25 watts. Antennae consisted of three long wire systems erected between trees, varying from 150 to 400 ft. in length, and 25 to 30 ft. in height.

Vibrator power supplies powered all the equipment, including a modified Halicrafter SX25 Rx, powered from 6 volt accumulators.

**Phone**: VK3LN, Len Moncur, assisted by G. Dennis, VK3TP, carried off the first place in the Phone Section with a Type 3 Mk. II, using 8 watts input feeding alternatively two 40 metre half wave dipoles and a 20 metre half wave dipole. Their location was Kellor.

**C.W.**: VK4AP, A. Guildford, did a magnificent job of "breaking the tape" in the c.w. section with more bonus points than contact points. He was assisted with the erection of his station by a New Australian, Ernie Ballantyne, who is also an R.S.G.B. member.

A Bendix 221-D was used as a v.f.o. followed by 6SH7, 6SH7, 6V6 and 607 final running 15-18 watts with the antenna connected. The location was Lota—almost on the sea front about 15 miles from Brisbane.

A quite terrific supply of h.d. 6 volt and 12 volt batteries, 45 volt h.d. battery banks, 32 volt d.c. to 230 volt a.c. inverter, together with a 32 volt charger loaned by the courtesy of a local firm powered the rig into a 136 ft. single wire antenna end fed with tuned feeders.

As an indication of what can be done, VK4AP logged VS6, ZL2, SM5, W7, KH6, LU9 amongst other DX. A very fine effort for 37 contacts on two bands.

VK4KS and VK7SR ran abreast for third place in the phone section and each will receive a certificate.

Let's hope that next year bigger and better logs will be sent in. And don't forget, chaps, send in your log, however small the number of contacts.

— . . . —

## HINT ON MEASURING AERIAL

Next time you borrow a tape to measure the wire for an antenna, drive several pegs in the ground—survey peg fashion—known distances apart, say 33 feet and 66 feet. This will obviate the necessity for borrowing the tape on future occasions as you will now have convenient datum points from which to measure the lengths of wire commonly used in Amateur band antennae.

Setting a New Standard in Communication Receivers—

## The "Commander" Double Superhet.

Free Data Sheets on Request

Interstate Representatives: West. Aust.—Messrs. Atkins (W.A.) Ltd., 894 Hay St., Perth. Queensland—Messrs. A. E. Harrold, 123-5 Charlotte St., Brisbane. In other States direct your inquiries to firms handling Bright Star Crystals.



Valves, new, boxed, RCA 834s, £1/8/- each.

6C4s, 12/- each.

Limited number of the following Taylor Tubes: TZ20s, £2/10/- each; TB35s, £6/10/- each.

Transmitters altered for Bush Fire and Fishing Boat Work.

CRYSTALS, as illustrated, 40 or 30 mx., AT or BT cut. Accuracy 0.02% of your specified frequency, £2/12/6 each.

20 metre Zero Drift, £5 each.

Large, unmounted, 40 or 80 metre, £2 each.

Special and Commercial Crystals—Prices on application. Crystals re-ground, £1 each.

BRIGHT STAR CRYSTALS may be obtained from the following Interstate firms: Messrs. A. E. Harrold, 123 Charlotte St., Brisbane; A. G. Healing Ltd., 151 Pirie St., Adelaide; Atkins (W.A.) Ltd., 894 Hay St., Perth; Lawrence & Hanson Electrical Pty. Ltd., 120 Collins St., Hobart; Collins Radio, 409 Lonsdale St., Melbourne; Prices Radio, 5-6 Angel Place, Sydney.

## DC11 TYPE CRYSTAL HOLDERS WANTED. ANY QUANTITY.

Screw-type Neutralising Condensers (National type), suits all triode tubes, Polystyrene insulation, 19/6 ea.

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# BRIGHT STAR RADIO

1839 LOWER MALVERN ROAD, GLEN IRIS, VIC. Phone: UL 5510.



# Commonwealth Jubilee VK-ZL DX Contest

## CONTEST RULES—OCTOBER, 1951

On the 1st January, 1901, Federation was proclaimed in Australia and this meant the conversion of Colonies into States and these States became part of a new Nation. This year, Australia is celebrating the Jubilee of this memorable occasion by many and varied ceremonies in all parts of the Commonwealth and the VK-ZL DX Contest will not be the least important event by any means.

The Commonwealth Government has honoured the Wireless Institute of Australia by the recognition of one of the World's leading Radio Contests by making available a monetary grant and it is the intention of the Institute to show its appreciation of this allocation by making the Jubilee VK-ZL DX Contest the best Contest to date and your co-operation and assistance is sought.

You can make this Contest a very successful one by entering either the c.w. or phone sections, or for that matter both, and by sending in your log irrespective of the number of contacts you have had.

The Contest is divided into three Sections, viz.: c.w., phone, and receiving. The c.w. section will commence at 0001 G.M.T., Saturday, 13th October, and will conclude at 1200 G.M.T., Sunday, 14th October. The phone section will commence 0001 G.M.T., Saturday, 20th October, and conclude at 1200 G.M.T., Sunday, 21st October. The receiving section covers both c.w. and telephony.

You may enter the phone section, viz.: all in either section. A separate log must be forwarded for all sections entered. Additional log sheets may be obtained from your Divisional Secretary.

Serial numbers must be exchanged during the Contest as follows:—The first three figures will be the RST in the c.w. section followed by serial number of the contact commencing with any number between 001 and 100 for the first contact and increasing in value by one for each successive contact. In the phone section, the first two figures will be the RS report and then as in the c.w. section.

The method of scoring is quite simple. One point is scored for each contact and the final score is obtained by multiplying the number of contacts by the number of countries or VK-ZL Districts worked on each band.

Logs must show in this order: Date, time (G.M.T.), band, call of station worked, serial number sent and received, and new country or VK-ZL District worked.

A cup will go to the highest scoring station in both Australia and New Zealand, whilst a plaque or medalion will go to the highest scoring stations in each State of Australia and District of New Zealand. Certificates will be presented to other place getters. This procedure will be the same for all countries outside Australia.

Each W District and British Isles Prefix will be regarded as separate countries. The Contest Committee reserve the right to decide the type and number of prizes or Certificates to be allocated. This will depend entirely upon the number of logs received from any particular country.

The New Zealand Association of Radio Transmitters are co-operating with the Wireless Institute of Australia in conducting this Contest.

Overseas logs should be received by the Chairman, Contest Committee, Box 1734, G.P.O., Sydney, Australia, not later than 31st January, 1952. VK-ZL logs should reach the Contest Committee at a similar point not later than 31st January. Every contestant will receive a copy of the results, together with a QSL acknowledging his

participation in this Jubilee DX Contest. Remember, please send your log in irrespective of the number of contacts you have made.

Here are the Rules in detail:—

**Dates:** (a) c.w. operation—second week-end in October from 0001 G.M.T., Saturday, 13th October, to 1200 G.M.T., Sunday, 14th October. (b) Phone operation—third week-end in October, from 0001 G.M.T., Saturday, 20th October, to 1200 G.M.T., Sunday, 21st October.

**Duration:** (a) VK and ZL stations for contest purposes will limit their period of operation to any consecutive 24-hour period on each week-end within the times given above. Once an operator commences operation, the operator will not exceed 24 hours of operation reckoned from such commencing time.

(b) In other countries, stations may contact VK and ZL stations at any time within the periods shown above.

### TRANSMITTING

1. There shall be three main sections to the Contest: (a) Transmitting c.w.; (b) Transmitting phone; (c) Receiving (phone and c.w.).

2. Contestants may compete in the open events (i.e. all bands) or on one or more individual bands by submitting a log for each individual band.

3. The Contest is open to all licensed transmitting Amateurs and receiving stations in any part of the world. No prior entry need be made at mobile stations (if outside Australian and New Zealand territorial waters) may count as contacts, but not as multipliers.

4. C.w. will be used for the first week-end of the Contest and phone for the second week-end. Stations entering for both c.w. and phone sections must submit separate logs for both phone and c.w.

5. All Amateur frequency bands may be used. Cross-band operation will not be permitted.

6. Only one contact per band is permitted with any one station (for contest purposes).

7. Only one licensed Amateur is permitted to operate any station under the owner's call sign. Should two or more operators operate any particular station, they will be considered as a competitor and must submit a separate log under his own call sign.

8. Serial numbers to be exchanged during the Contest will be as follows:—

(a) For c.w. the first three figures will be the RST (telephony) report, followed by the serial number of the contact commencing with any number between 001 and 100 for the first contact and increasing in value by one for each successive contact. If any contestant reaches 999 he will then start 001 and continue 002, 003, 004, etc.

(b) For phone, the first two figures will be the RS (telephony) report, followed by the serial number of the contact commencing with any number between 001 and 100 for the first contact and increasing in value by one for each successive contact—five figures in all. If any contestant reaches 999 he will then start 001 and continue 002, 003, 004, etc.

9. Scoring: One point will be scored for each contact on a specific band with any overseas country (VK-ZL District for overseas stations). The final score will be obtained by multiplying the total contacts on each band by the total number of countries worked on each band.

The A.R.R.L. Official Countries List will be used except that in the case of the U.S.A., each call area shall be considered as a country. VK-ZL Districts are VK1, 2, 3, 4, 5, 6, 7, 9; and ZL1, 2, 3, 4.

10. Logs: (a) Logs must show in this order:—Date, time (G.M.T.), band, call of station worked, serial number sent, serial number received, and new country or VK-ZL District worked.

(b) A separate log must be submitted for each band for which an individual entry is intended. For the open section an all-band log is required.

Each log must show a summary as follows:—The number of effective contacts, multiplier obtained, and total points, together with a statement of call sign, name and address, whether phone or c.w., single band or all-band operation.

Each page of the log must be numbered and signed by the contestant.

The ruling of the Contest Committee of the W.I.A. will be final in the event of any dispute.

11. Awards: A cup will be awarded to the highest scoring stations in the open section in Australia and New Zealand. A medalion, plaque or certificate will go to the highest scoring stations outside Australia and New Zealand. The Committee reserve the right to determine the type and number of prizes to be allocated. This will depend entirely upon the number of logs received from any particular country. Every entrant will receive a copy of the final scores, together with a QSL acknowledging his participation.

12. Entries from overseas stations should be endorsed "VK-ZL Contest," and should reach the Chairman, Contest Committee, Box 1734, G.P.O., Sydney, Australia, not later than 31st January, 1952. VK-ZL logs should reach the Contest Committee not later than 30th November, 1951.

### RECEIVING SECTION

1. The rules for the receiving section are the same as for the transmitting section, but it is open to all members of any shortwave listeners' society in the world. No transmitting station is permitted to enter for the receiving section.

2. The Contest times and the logging of stations once on each band per week-end are as for the transmitting section. Logs will be in the same form as for the transmitting section.

3. To count for points, the call sign of the station being called, the strength and tone of the called station, together with the serial numbers sent by the calling station must be entered in the log. One point may be claimed for each entry complying with the above details.

4. It is not sufficient to log a station calling "CQ Contest."

5. VK receiving stations may log overseas stations and ZL stations. ZL receiving stations may log overseas stations and VK stations. Overseas receiving stations may log only VK and ZL stations.

6. Awards to be determined by the Contest Committee.

### COPY OF LOG SHEET

Section C.W. Open ..... Band ..... Call .....  
Phone Open ..... Band .....

Australia's Jubilee Celebrations  
Commonwealth Jubilee VK-ZL DX Cont. 1951  
Organised by the Wireless Institute of Australia in association with the New Zealand Association of Radio Transmitters on behalf of Commonwealth of Australia Jubilee Committee

Band	VK-ZL Dist. Countries	Contacts	Points
3.5 Mc.			
7 Mc.			
14 Mc.			
27 Mc.			
28 Mc.			
Total			
Name			
Address			

I hereby declare that my station was operated in accordance with the Rules and spirit of this Contest and I agree that the decision of the Contest Committee shall be final and binding in all matters pertaining to the Contest.  
Date ..... Signed .....

Date ..... Station Serial No. Country-  
Time Band Worked Sent Recvd. District Points



## AUGUST, 1951



# FIFTY MEGACYCLES AND ABOVE

Compiled by J. K. RIDGWAY, VK3CR.

V.h.f. men were shocked to hear of the tragic death of 7MC and his son Athol in a car accident. It will be remembered that when contact between VK3 and VK7 was first established on 144 Mc., 7MC was one of the first stations on the job, and his untimely death will leave a gap in northern VK7 Kandom that will be hard to fill. Our sympathies are extended to his family and relatives, and to the Hams of Launceston who have lost a friend.

## GENERAL V.H.F. NEWS

### NEW SOUTH WALES

As the weeks pass, it begins to look as though the usual midwinter DX opening will not take place this year. So far the band hasn't even looked like being open and the beacons have been absent. Perhaps this accounts for the poor activity on the band, although three old ones re-appeared after a long silence. These were 2AH, 2DV and 2ABZ. 2DV appears to have been having some bother with minor troubles since he got the rig going again—must be the rusty joints Snow.

V.h.f. activity this month has once again been concentrated on 144 Mc., 50 Mc. being very sparsely populated. Despite these conditions, an activity list for both bands disclosed that sixty-one stations were active for the month of June. This list was compiled by 2QZ and is as follows: 2AH, 2DV, 2CZ, 2CZV, 2ZC, 2ZCA, 2ZCB, 2ZCL, 2ZD, 2ZK, 2ZL, 2ZM, 2ZQ, 2ZP, 2ZU, 2ZV, 2ZW, 2ZXX, 2ZYY, 2ZAA, 2ZAB, 2ZAC, 2ZAD, 2ZAE, 2ZAF, 2ZAG, 2ZAH, 2ZAI, 2ZAJ, 2ZAK, 2ZAL, 2ZAM, 2ZAN, 2ZAO, 2ZAP, 2ZAQ, 2ZAR, 2ZAS, 2ZAT, 2ZAU, 2ZAV, 2ZAW, 2ZAX, 2ZAY, 2ZAZ, 2ZBA, 2ZBB, 2ZBC, 2ZBD, 2ZBE, 2ZBF, 2ZBG, 2ZBH, 2ZBI, 2ZBJ, 2ZBK, 2ZBL, 2ZBM, 2ZBN, 2ZBO, 2ZBP, 2ZBQ, 2ZBR, 2ZBS, 2ZBT, 2ZBU, 2ZBV, 2ZBW, 2ZBX, 2ZBY, 2ZCA, 2ZCB, 2ZCC, 2ZCD, 2ZCE, 2ZCF, 2ZCG, 2ZCH, 2ZCI, 2ZCJ, 2ZCK, 2ZCL, 2ZCM, 2ZCN, 2ZCO, 2ZCP, 2ZCQ, 2ZCR, 2ZCS, 2ZCT, 2ZCU, 2ZCV, 2ZCW, 2ZCX, 2ZCY, 2ZD, 2ZDA, 2ZDB, 2ZDC, 2ZDD, 2ZDE, 2ZDF, 2ZDG, 2ZDH, 2ZDI, 2ZDJ, 2ZDK, 2ZDL, 2ZDM, 2ZDN, 2ZDO, 2ZDP, 2ZDQ, 2ZDR, 2ZDS, 2ZDT, 2ZDU, 2ZDV, 2ZDW, 2ZDX, 2ZDY, 2ZEA, 2ZEB, 2ZEC, 2ZED, 2ZEE, 2ZEF, 2ZEG, 2ZEH, 2ZEI, 2ZEJ, 2ZEK, 2ZEL, 2ZEM, 2ZEN, 2ZEO, 2ZEP, 2ZEQ, 2ZER, 2ZES, 2ZET, 2ZEU, 2ZEV, 2ZEW, 2ZEX, 2ZEY, 2ZFA, 2ZFB, 2ZFC, 2ZFD, 2ZFE, 2ZFF, 2ZFG, 2ZFH, 2ZFI, 2ZFJ, 2ZFK, 2ZFL, 2ZFM, 2ZFN, 2ZFO, 2ZFP, 2ZFQ, 2ZFR, 2ZFS, 2ZFT, 2ZFU, 2ZFV, 2ZFW, 2ZFX, 2ZFY, 2ZGA, 2ZGB, 2ZGC, 2ZGD, 2ZGE, 2ZGF, 2ZGG, 2ZGH, 2ZGI, 2ZGJ, 2ZGK, 2ZGL, 2ZGM, 2ZGN, 2ZGO, 2ZGP, 2ZGQ, 2ZGR, 2ZGS, 2ZGT, 2ZGU, 2ZGV, 2ZGW, 2ZGX, 2ZGY, 2ZHA, 2ZHB, 2ZHC, 2ZHD, 2ZHE, 2ZHF, 2ZHG, 2ZHI, 2ZHJ, 2ZHK, 2ZHL, 2ZHM, 2ZHN, 2ZHO, 2ZHP, 2ZHQ, 2ZHR, 2ZHS, 2ZHT, 2ZHU, 2ZHV, 2ZHW, 2ZHX, 2ZHY, 2ZIA, 2ZIB, 2ZIC, 2ZID, 2ZIE, 2ZIF, 2ZIG, 2ZIH, 2ZII, 2ZIJ, 2ZIK, 2ZIL, 2ZIM, 2ZIN, 2ZIO, 2ZIP, 2ZIQ, 2ZIR, 2ZIS, 2ZIT, 2ZIU, 2ZIV, 2ZIW, 2ZIX, 2ZIY, 2ZJA, 2ZJB, 2ZJC, 2ZJD, 2ZJE, 2ZJF, 2ZJG, 2ZJH, 2ZJI, 2ZJJ, 2ZJK, 2ZJL, 2ZJM, 2ZJN, 2ZJO, 2ZJP, 2ZJQ, 2ZJR, 2ZJS, 2ZJT, 2ZJU, 2ZJV, 2ZJW, 2ZJX, 2ZJY, 2ZKA, 2ZKB, 2ZKC, 2ZKD, 2ZKE, 2ZKF, 2ZKG, 2ZKH, 2ZKI, 2ZKJ, 2ZKK, 2ZKL, 2ZKM, 2ZKN, 2ZKO, 2ZKP, 2ZKQ, 2ZKR, 2ZKS, 2ZKT, 2ZKU, 2ZKV, 2ZKW, 2ZKX, 2ZKY, 2ZLA, 2ZLB, 2ZLC, 2ZLD, 2ZLE, 2ZLF, 2ZLG, 2ZLH, 2ZLI, 2ZLJ, 2ZLK, 2ZLL, 2ZLM, 2ZLN, 2ZLO, 2ZLP, 2ZLQ, 2ZLR, 2ZLS, 2ZLT, 2ZLU, 2ZLV, 2ZLW, 2ZLX, 2ZLY, 2ZMA, 2ZMB, 2ZMC, 2ZMD, 2ZME, 2ZMF, 2ZMG, 2ZMH, 2ZMI, 2ZMJ, 2ZMK, 2ZML, 2ZMN, 2ZMO, 2ZMP, 2ZMQ, 2ZMR, 2ZMS, 2ZMT, 2ZMU, 2ZMV, 2ZMW, 2ZMX, 2ZMY, 2ZNA, 2ZNB, 2ZNC, 2ZND, 2ZNE, 2ZNF, 2ZNG, 2ZNH, 2ZNI, 2ZNJ, 2ZNK, 2ZNL, 2ZNM, 2ZNN, 2ZNO, 2ZNP, 2ZNQ, 2ZNR, 2ZNS, 2ZNT, 2ZNU, 2ZNV, 2ZNW, 2ZNX, 2ZNY, 2ZOA, 2ZOB, 2ZOC, 2ZOD, 2ZOE, 2ZOF, 2ZOG, 2ZOH, 2ZOI, 2ZOJ, 2ZOK, 2ZOL, 2ZOM, 2ZON, 2ZOO, 2ZOP, 2ZOQ, 2ZOR, 2ZOS, 2ZOT, 2ZOU, 2ZOV, 2ZOW, 2ZOX, 2ZOY, 2ZPA, 2ZPB, 2ZPC, 2ZPD, 2ZPE, 2ZPF, 2ZPG, 2ZPH, 2ZPI, 2ZPJ, 2ZPK, 2ZPL, 2ZPM, 2ZPN, 2ZPO, 2ZPP, 2ZPQ, 2ZPR, 2ZPS, 2ZPT, 2ZPU, 2ZPV, 2ZPW, 2ZPX, 2ZPY, 2ZQA, 2ZQB, 2ZQC, 2ZQD, 2ZQE, 2ZQF, 2ZQG, 2ZQH, 2ZQI, 2ZQJ, 2ZQK, 2ZQL, 2ZQM, 2ZQN, 2ZQO, 2ZQP, 2ZQQ, 2ZQR, 2ZQS, 2ZQT, 2ZQU, 2ZQV, 2ZQW, 2ZQX, 2ZQY, 2ZRA, 2ZRB, 2ZRC, 2ZRD, 2ZRE, 2ZRF, 2ZRG, 2ZRH, 2ZRI, 2ZRJ, 2ZRK, 2ZRL, 2ZRM, 2ZRN, 2ZRO, 2ZRP, 2ZRQ, 2ZRR, 2ZRS, 2ZRT, 2ZRU, 2ZRV, 2ZRW, 2ZRX, 2ZRY, 2ZSA, 2ZSB, 2ZSC, 2ZSD, 2ZSE, 2ZSF, 2ZSG, 2ZSH, 2ZSI, 2ZSJ, 2ZSK, 2ZSL, 2ZSM, 2ZSN, 2ZSO, 2ZSP, 2ZSQ, 2ZSR, 2ZSS, 2ZST, 2ZSU, 2ZSV, 2ZSW, 2ZSX, 2ZSY, 2ZTA, 2ZTB, 2ZTC, 2ZTD, 2ZTE, 2ZTF, 2ZTG, 2ZTH, 2ZTI, 2ZTJ, 2ZTK, 2ZTL, 2ZTM, 2ZTN, 2ZTO, 2ZTP, 2ZTQ, 2ZTR, 2ZTS, 2ZTT, 2ZTU, 2ZTV, 2ZTW, 2ZTX, 2ZTY, 2ZUA, 2ZUB, 2ZUC, 2ZUD, 2ZUE, 2ZUF, 2ZUG, 2ZUH, 2ZUI, 2ZUJ, 2ZUK, 2ZUL, 2ZUM, 2ZUN, 2ZUO, 2ZUP, 2ZUQ, 2ZUR, 2ZUS, 2ZUT, 2ZUU, 2ZUV, 2ZUW, 2ZUX, 2ZUY, 2ZVA, 2ZVB, 2ZVC, 2ZVD, 2ZVE, 2ZVF, 2ZVG, 2ZVH, 2ZVI, 2ZVJ, 2ZVK, 2ZVL, 2ZVM, 2ZVN, 2ZVO, 2ZVP, 2ZVQ, 2ZVR, 2ZVS, 2ZVT, 2ZVU, 2ZVV, 2ZVW, 2ZVX, 2ZVY, 2ZWA, 2ZWB, 2ZWC, 2ZWD, 2ZWE, 2ZWF, 2ZWG, 2ZWH, 2ZWI, 2ZWJ, 2ZWK, 2ZWL, 2ZWM, 2ZWN, 2ZWO, 2ZWP, 2ZWQ, 2ZWR, 2ZWS, 2ZWT, 2ZWU, 2ZWV, 2ZWV, 2ZWX, 2ZWY, 2ZXA, 2ZXB, 2ZXC, 2ZXD, 2ZXE, 2ZXF, 2ZYG, 2ZYH, 2ZYI, 2ZYJ, 2ZYK, 2ZYL, 2ZYM, 2ZYN, 2ZYO, 2ZYP, 2ZYQ, 2ZYR, 2ZYS, 2ZYT, 2ZYU, 2ZYV, 2ZYW, 2ZYZ, 2ZZA, 2ZZB, 2ZZC, 2ZZD, 2ZZE, 2ZZF, 2ZZG, 2ZZH, 2ZZI, 2ZZJ, 2ZZK, 2ZZL, 2ZZM, 2ZZN, 2ZZO, 2ZZP, 2ZZQ, 2ZZR, 2ZZS, 2ZZT, 2ZZU, 2ZZV, 2ZZW, 2ZZX, 2ZZY, 2ZZZ.

## 50 Mc. W.A.S.

Call	Certificate Number	Additional Number	Countries
VK1WJ	13	3	2
VK4RY	2	2	2
VK2VW	9	2	2
VK3LC	8	2	2
VK6DW	3	1	1
VK4HR	4	1	1
VK3FG	3	1	1
VK3RE	3	1	1
VK3HT	7	1	1
VK2AEZ	10	1	1
VK3RE	10	1	1
VK3GM	12	1	1
VK2ABC	8	1	1

The N.S.W. V.h.f. Group would be pleased to hear from country V.h.f. contesters, good and bad, who operate on v.h.f. in their district and what type of equipment is in use, the aim being to disseminate information and help one another. So, if you do use any of the bands from 50 Mc. upwards, drop a line to the Secretary, V.h.f. Group, W.I.A., 30 Noble Street, Hurstville, N.S.W.

## VICTORIA

The sympathies of Victorian v.h.f. men are extended to Peter 2AFL who, in the recent death of his mother, Peter is a well known 2 and 6 metre man.

Eric Stan Skinner, has taken up residence in Ascot Vale, Melbourne, under the call sign of 2AFL, and is already operating on 50 Mc.; will soon be active on 50 Mc. and 3JE who put in an appearance recently. We are glad to hear 3ACU's signal again after an absence of many months. Eric is well on the road to recovery from his recent serious illness, and now in the process of repairing his beam.

## SOUTH AUSTRALIA

All v.h.f. men wish to congratulate Reg 5QR on winning the 1500 contest, a good ending. Reg. The main topic of recent weeks has been the rules suggested by VK3 for the v.h.f. contest for next year. While on contests, we are informed that the 1500 contest for 1965, v.h.f. contest next year and some very good trophies are to be offered, some for the country man who has been on the band here, and some for the v.h.f. and prove that it is better than the lower frequencies for local work.

The subject of all our chaps re helping with getting them going on v.h.f. still stands. You will want to be in on this v.h.f. contest, so get started on your gear now. 5QR's suggestion for the 1500 contest for 1965, for Sunday nights has not been fully supported as yet, although there is quite a bit of activity at that time.

SAX is still heard after the W.I.A. session on 50 Mc. each Sunday. 5BC and 5HD are on 50 Mc. 5RM is on 50 Mc. 5RM started a QSO on 3.5 Mc. then 7 Mc., and finished up on 50 Mc., heard to remark that v.h.f. was the best band for 15 years. Pete, 5GA is dabbling with harmonic oscillators, using a 6A6. 5JD is back from VK3 and has cured him in the transmission, his 6A6 has been replaced now. 5RO using flea power to a 6J6; good signal. 5GP also using 6J6—0.15 watt to a 6A6. 5MD has a good signal. 5JY has come to 50 Mc. 5BY; only on c.w. but a good start. 5MK vacated 288 for 50 Mc.; has bad time in modulation, but is getting quite good. A few weeks, bobbed up with QRO and nice sig.

## 144 Mc. DOINGS OF THE MONTH

### NEW SOUTH WALES

New stations on this band are 2VL and 2AFZ. 2VL is using 7183s and hopes to shortly make up a crystal controlled TX using an 832 in the final. Quite a number of new stations are preparing to attack the two metre band for the contest. 2ZA made the long trip from Woy Woy to Sydney and back to collect a 522 Tx which should be on the band here in a few days. 2AYP has just got his P38 Rx going and hopes to have a 522 Tx going before the contest. Mobile work is still occupying the attention of some of the stations on 144 Mc. Recently, 2ABO, 2HL, 2YM and 2ANF were all out on the one afternoon and with the exception of 2YM who was not heard by the others, all met in person near the water tanks at Mobb's Hill, a favourite v.h.f. spot. 2ABO is using a 522 controlled rig with 832 in the final and clamp tube mod. 2XX has his mobile rig in action but is having modulator trouble.

2ZLS has a 522 Tx going and putting out a very strong signal on a dipole. Llanor hopes to put up a beam shortly and add the Rx section of the 522 in place of his present ASV Rx. 2HO had some excitement one morning when listening around the band. He heard a very weak m.c.w. signal on the low end of 144 Mc. which Roy read as a W1ED call. He was sent to the U.S.A. to seek verification but at time of writing no news has been received. Being an old hand, Roy is not likely to have given up, but the call sign so hope is not yet abandoned. The previously reported reception of W signals on two metres was not verified as the station heard was being relayed by another station on ten metres at the same time.

2ARG has made a comeback on two and still putting out large slices of signal on 144 Mc. Bob is hoping to hook on an 829B very shortly. 2MQ is re-building the final of his Tx using flat top. This rig, using 6BEs in the final and the one described some time ago in the pages

of this magazine, 2ADY, the Gladesville Radio Club station, is being heard regularly on Sunday nights on both 2 and 6 working club members and others. The club is holding a contest to run during one Sunday night of the 144 Mc. contest so this year the 144 Mc. contest should be bigger than ever.

2QZ has finally tamed his new Tx. 2ANF is talking new ideas and new Tx. The North Coast boys are getting interested in 144 and 2QZ reports intentions of a number of them to make a h.h.f. contest for 1965 for themselves. Such equipment should prove extremely valuable for the flood emergency nets. 2ZC is very busy for the 144 Mc. contest. 50 Mc., could provide the certain and reliable conditions which the 7 Mc. band does not.

## VICTORIAN V.H.F. GROUP NOTES

Next Group meeting is on Wednesday night, 18th August at the W.I.A. rooms. Details of the evening's activities have not yet been decided, but will be publicised over 3WL broadcasts. A large gathering at the June meeting heard an interesting report by Sqn. Ldr. Hargrave backed by two films depicting anomalous propagation, and weather conditions likely to produce anomalous propagation of radio waves. The sound projector was loaned by Pastor Doug Nicholls who also brought along a colour film showing the life story of Albert Namatira, the famous aborigine. All pictures were well received by those present.

Sqn. Ldr. Hargrave in his address stated that factors affecting propagation of radio waves are not affected by ionospheric conditions but may be affected by tropospheric conditions. Ionospheric conditions permit of the propagation of short skip conditions on lower frequencies, known as sporadic E, are quite unpredictable. The film on anomalous propagation showed how, normally, outside the range of radio stations suddenly appear on the c.r.o. screen and so render it useless for its normal purposes. The second film showed how the refraction index of the atmosphere under certain weather conditions causes sufficient bending of v.h.f. radiation to enable the signal to be received. The nature and how the effect known as ducting can occur. It was interesting to note that the refracting layer could be fewer miles above the ground and that refracting layers occur more frequently at low altitudes than at heights necessary to produce ducting at 144 Mc. Hence it appears that the likelihood of making more frequent contacts with distant stations.

After the films, the meeting was opened for general business, which, fortunately, was soon disposed of. The most outstanding item was the revelation that a donation of a pair of 24Gs as a prize for a 24 Mc. contest had been received. It was about two years ago (acknowledged in these notes in May, 1964, issue) but had never been received. However, the 24G was in the library until their presence was accidentally discovered recently. 3XA and 3JO were appointed to committee to draw up the rules for a contest for 24 Mc. These will be printed in these notes next month, but, as it is likely that the contest will open on 1st September, the contest will be closed by the end of 5th Mc. rigs at once.

In the notes from VK3 last month it was stated that the v.h.f. test rig met with their approval. To date, no claims for membership have been received here, but judging from remarks it seems it is to be a very necessary for verification of contacts, are harder to get than actual contacts.

## 576 MEGACYCLES

### NEW SOUTH WALES

As reported last month, tests were carried out with horizontal and vertical polarisation by 2ZC, 2ZJA and 2ZV. The results showed that horizontal was superior and since the tests most of those operating on the band have changed to horizontal. However, the 2ZV reports that the tests really did not prove anything as the horizontal beams were 24 element types, whereas the vertical beams were of the simple four element type. 2ZD had been using vertical and horizontal beams but the east coast chaps' beams were not the same and definitely favoured the horizontal type. The test was therefore unfairly biased in favour of horizontal. However, as the 24 element beams give six stacks of horizontal beams, the 2ZV reports that, when used vertically, horizontal polarisation should suit them better.

A new station on the band and has already contacted 2WJ and 2AJZ using a small transceiver with a lighthouse tube. He plans to get a pair of larger lighthouse tubes going for 2ZC, 2ZJA and 2ZV. 2ZST is about to use the RL18s in the recent field day contest, has put them to good use and now has a Tx and 6X going. 2ZV is also about to get a new Tx and Rx going and should do fairly well when he gets a beam up in the air.

2ZC is still using 6BEs in the final and the one described some time ago in the pages

# FEDERAL, QQL, and DIVISIONAL NOTES

Federal President: G. GLOVER (VK3AG); Federal Secretary: G. M. HULL (VK3ZS); Box 2611W, G.P.O., Melbourne.

## NEW SOUTH WALES

President: Matt Nye, VK2XU.

Secretary: David H. Duff (VK2EO), Box 1734 G.P.O., Sydney.

Meeting Night: Fourth Friday of each month at Science House, Corner Gloucester and Essex Sts., Sydney.

Divisional Sub-Editor: Don B. Knock, VK2NO, 43 Yankoo Avenue, Waverley, Sydney.

Zone Correspondents: North Coast and Tablelands: H. M. Retallick, VK2XO, Raleigh; Newcastle: Ron M. McD. Stuart, VK2ASJ, 98 Dunbar St., Sydney; Coalesfield and Laidlaw: Harry Hawkins, VK2YL, 27 Comfort Ave., Cessnock; Western: W. H. Stitt, VK2WH, Camblow, Forster; South Coast and Southern: Roy Raynor, VK2DO, 42 Pettit St., Yass; Eastern Suburbs: Don Knock, VK2NO, 42 Yankoo Ave., Waverley; Northern Suburbs: Harry Powell, VK2AV, Russell Ave., Wahroonga; St. George: Chas. Coyle, VK2YK.

## VICTORIA

President: G. S. C. Semmens, VK3GS.

Secretary: C. Dyer (VK3DY), 19 Collington Ave., Brighton (C.A. 529).

Administrative Secretary: Mrs. S. May, Law Court Chambers, 181 Queen St., Melbourne.

Meeting Night: First Wednesday of each month at the Radio School, Melb. Technical College.

Zone Correspondents: Western: C. C. Faring, VK3YW, 12 Skene St., Stawell; South Western: K. O'Rourke, VK3AKR, Killgrew, Westmere; North Eastern: T. K. Tennant, c/o Victoria Theatre, Victoria; North West: J. C. Bells, VK3GZ, 101 Lemon Ave., Mildura; Eastern: H. O. Kellas, VK3AHK, Timbarra; North Western: C. Case, VK3ACE, Cummins Ave., Birchip.

## FEDERAL

### FEDERAL CONSTITUTION ALTERATIONS

Federal Executive, on behalf of the Federal Council of the W.I.A., hereby gives notice that it is intended to alter the Federal Constitution of the W.I.A. (as amended 1947).

Section 21 as follows: By deleting the words "within 60 days immediately preceding" and inserting in lieu thereof "60 days prior to."

Section 28 as follows: (a) Deleting the words "Headquarters" in lines three and four, and inserting the word "any" in lieu thereof; and (b) deleting the words "the Headquarters" in line 7, and inserting the word "appropriate" in lieu thereof.

### SLOW MORSE TRANSMISSIONS

The following transmissions from the official W.I.A. stations are given on 3500 Kc. on the days and times shown below:—

Sunday—VK3W1, 2030 to 2100 hours E.A.S.T. Monday—VK3W1, 2030 to 2100 hours E.A.S.T. Tuesday—VK4W1, 1930 to 2000 hours E.A.S.T. Wednesday—VK5W1, not operating at present. Thursday—VK5W1, 1930 to 2000 hours E.A.S.T. Friday—VK7W1, 2030 to 2100 hours E.A.S.T.

### INTERFERENCE TO OFFICIAL BROADCASTS

With monotonous regularity, interference on the official W.I. broadcast channel frequency of 715 Kc. still persists despite repeated requests that this channel be kept clear on Sunday mornings. Chaps, even if YOU are not interested in W.I.A. activities, please give those who ARE interested a chance to hear.

On one or two occasions recently, W.I. stations themselves have remained on the channel after cessation of the Divisional broadcast, thus interfering with the broadcast from the next official station on the schedule. When your Division has concluded its broadcast PLEASE be sure to change frequency to the Intra-state channel. In the Eastern States particularly, the broadcast is very often stronger in adjacent States than it is in the State in which the programme originates.

### REMEMBRANCE DAY CONTEST

Just a reminder that the Remembrance Day Contest is scheduled for the week-end, 11th and 12th August, and contrary to rule one (1) as published in the July issue of "Q.R." the Contest is twenty-five hours' duration for any participant.

## WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK3W1: Sundays, 1100 hours EST, 7196 Kc. and 2000 hours EST 50 and 144 Mc. No frequency checks available from VK3W1. Intra-State working frequency, 7175 Kc.

VK3W1: Sundays, 1130 hours EST, simultaneously on 3595 and 7196 Kc. and re-broadcast on 50 and 144 Mc. bands. Intra-State working frequency 7185 Kc. Individual frequency checks of 50 and 144 Mc. Stations given when VK3W1 is on the air.

VK4W1: Sundays, 0900 hours EST, simultaneously on 3750 Kc., 7196 Kc., 1432 Kc., 32.4 Mc. and 144.138 Mc. Frequency checks are given two nights weekly, and the times are announced during Sunday broadcasts. 7065 Kc. channel is used from 1000 to 1030 hours each Sunday as VK4 query service to VK4W1.

VK5W1: Sundays, 1000 hours EAST, on 7196 Kc. Frequency checks are given by VK5DW by arrangements only on the 7 and 14 Mc. bands.

VK6W1: Sundays, 0930 hours WEST, on 7196 Kc. No frequency checks available.

VK7W1: Sundays, at 1000 hours EST, on 7196 Kc. and 145.5 Mc. No frequency checks are available.

## SILENT KEY

It is with deep regret that we record the passing of:—

VK4HF—Hal Fitzallen, June, 1951.

VK7MC—Ern Cooper, July, 1951.

Please take an interest in this most worthy Contest and send in your log even if you only have the bare minimum of six contacts required. —It all helps the Contest Committee to check the scores and adds materially to the State score in competing for the trophy.

Federal Executive have printed special Contest Log Sheets which have already been forwarded to each Division for circulation to members. Divisions have been asked to see that a supply is forwarded to each Zone for further circulation. It is particularly requested that every participant forward his Log on this approved Log Sheet; if your friends can't get into the various centres for them you can see that they obtain some.

There is space for 40 contacts on each sheet, so don't take more than you and/or your friends require.

The Log Sheets have been supplied on a per capita basis; if any Division has too many please make arrangements to forward the surplus to a Division or zone requiring more than anticipated. Thank you gentlemen—and may the best State win!

## W.I.A. ACTIVITIES CALENDAR

August 11-12: Remembrance Day Contest.  
October 15-14: VK-ZL Jubilee Contest (C.W. Section).  
October 20-21: VK-ZL Jubilee Contest (Phone Section).

## QUEENSLAND

President: J. H. Farrell, VK4WJ.

Secretary: J. F. Pickles, VK4FF, Box 6383, G.P.O., Brisbane.

Meeting Night: Third Friday in each month at the L.R.E. Rooms, Wickham St., Valley.

Divisional Sub-Editor: Clive J. Cooke, VK4CO, Kurran Street, Chermide, Brisbane.

## SOUTH AUSTRALIA

President: E. A. Barber, VK5MD.

Secretary: G. M. Bowen, VK5XU, Box 1234K, G.P.O., Adelaide.

Meeting Night: Second Tuesday of each month at 17 Waymouth St., Adelaide.

Divisional Sub-Editor: W. W. Parsons, VK5PS, 10 Victoria Avenue, Rose Park.

## WESTERN AUSTRALIA

President: J. Campbell-Watson, VK5WJ.

Secretary: H. B. Lang, Box N1002, G.P.O., Perth, W.A.

Meeting Place: Padbury House, Cr. St. George's Ter. and King St., Perth.

Meeting Night: Third Tuesday of each month. Divisional Sub-Editor: Alec A. Smith, VK5AS, 55 Weston St., Carlisle, Western Australia.

## TASMANIA

President: R. O'May, VK7OM.

Secretary: L. W. Edwards, VK7LE, Box 371B, G.P.O., Hobart.

Meeting Night: First Wednesday of each month at the Photographic Society's Rooms, 163 Liverpool St., Hobart.

Divisional Sub-Editor: S. Excell, VK7SJ, 77 Mollie St., Hobart, Tasmania.

North Zone Correspondent: C. A. Cullinan, VK7IXW, 12 Montrose Place, Launceston.

## GOOD NEWS

Members will be pleased to know that Gordon Weynton, VK2XU, Federal Vice-President, has recovered from severe injuries received some months ago when he was involved in a car accident.

Gordon has been heard back on the air in VK3 and is surely and steadily winning his way back to health and strength. We members of Federal Executive who have been more closely associated with Gordon can only too keenly injured he was and the tremendous will to live that no doubt pulled him through.

Every Amateur will wish Gordon the best 73 and a rapid return to his normal daily duties.

## TRAVELLING ABOARD

J. M. Dobbins, of the P.M.G.'s Department, and Sgt. Ldr. Ron Hargreaves (VK3AFB), have both left Australia for duties abroad in their respective spheres of duty. Federal Executive have given these gentlemen a letter of introduction to Amateur Societies abroad, should the opportunity present itself for them to attend overseas Societies' conventions or meetings, and they have expressed their pleasure and willingness to make personal contact with our overseas friends and bring back to us their impressions of Amateur Radio in other countries. We wish them a pleasant journey and a safe return to their native land.

## FREQUENCY ALLOCATIONS

The following is a list of the bands available for use by the Amateur Service in Australia, followed by the types of emission allowed on those bands.

3.5 to 3.8 Mc.—A1, 3, 3a, 6F3.
7.0 to 7.2 Mc.—A1, 3, 3a, 6F3.
14.0 to 14.4 Mc.—A1, 3, 3a, 6F3.
25.95 to 27.25 Mc.—A1, 3, 3a, 6F3.
28.0 to 30.0 Mc.—A1, 3, 3a, 6F3.
50.0 to 54.0 Mc.—A1, 2, 3, F.M.
140 Mc. to 145 Mc.—A1, 2, 3, F.M., Pulse.
288 to 295 Mc.—A1, 1, 2, 3, F.M., Pulse.
575 to 585 Mc.—A1, 1, 2, 3, F.M., Pulse.
1300 Mc.—A1, 2, 3, F.M., Pulse.
2300 to 2450 Mc.—A1, 1, 2, 3, F.M., Pulse.
5650 to 5850 Mc.—A1, 1, 2, 3, F.M., Pulse.
10000 to 10500 Mc.—A1, 1, 2, 3, F.M., Pulse.
21000 to 22000 Mc.—A1, 2, 3, F.M., Pulse.
30000 Mc. and higher—A1, 1, 2, 3, F.M., Pulse.

## NEW SOUTH WALES

### EASTERN AND SOUTHERN SUBURBS

Ern 2ASE says that he hasn't been on the air very much of late because of home jobs and getting ready for 144 Mc. with Andy 2AX egging him on in the latter direction. A welcome is extended to Joe 2AYH who is a new Amateur in the Bondi area. He started up on 20 and is now on 40 with a nice signal. Alf 2CE pops up now and again on 40 to discuss 144 Mc. with the Eastern Suburbs boys. Dave 2AYE is mostly occupied on 40, but will be on the other bands as soon as he gets the shack renewed. After talking about it for some time in pre-war days, Col 2ABD has broken out on v.h.f., and is on 6 metres. He talks of his doings there with 2VH and 2ACU. 2AIG Ray now operating on 144 Mc. Andy 2AD finds his location for 144 Mc. poor. Your Sub-Editor feces out in the cold about v.h.f., these days, after having "lived" on 'em for long pre-war years, and is hoping to find time to break out any tick of the clock. Bruce 2AZH active on 40 with nice phone signal, is yearning to get to his new southern suburb location.

George 2AII also on 40 phone with a n.f.m. signal, using a reactance modulator set-up. Ivan 2IN is heard at intervals on 40 phone, usually at the week-ends. A gale snapped a dural top section of 2NO's mast. Radio dealer Horrie Quaker had had luck in the more exam. recently for his ticket. Keep plodding OM, you'll make it in the end as others of mature age have done. Latest about Bill 2BC is that he is likely to give 'em away for a while and to break out on phone. Ted 2AHQ not heard for some time, recently had an arrival, a 4th harmonic. Jack 2EZ is heard at intervals on 20 phone and Jack 2FJ is said to be completing a new 20 metre beam for use at his new location somewhere up the coast. Most consistent 7KZ from a southerly direction heard on 80 in the Sydney area seems to be Alan 2ACC, of Heathcote. His phone signal from his 80 metre folded dipole is about the same strength by day and by night, ample indication that the boys really should make daylight use of 80 for contacts covering up to 300 miles or so. Heard frequently on 40 phone these days is the old "Sugar Apple," Wal 2SA. He is heard seeking and working the c.w. DX on 20; don't recall hearing him on any other band. Acknowledgment is made to 2ASE and 2AYE for assistance with news items.

### NORTH COAST AND TABLELANDS ZONE

Clive 2AGM has staged a come back and working 80. 2LH working 20, 6 and 80. Doe's new 80 antenna has made a big difference. 2ASO building new v.f.o. 2ADE too busy for much hamming, but works 2LH nightly on 6. 2LR and 2AUB active on 40 and 80. 2PA active on all bands during the week-ends only; Peter reports good results with his long wire antenna 80 feet high at one end. 2SH active on 20, using GPFO. 2AWS Len will soon be on the air again and has two 95 feet electric light poles to erect for masts. 2AEY busy hunting gold dust. 2AHA building 50 and 144 gear. 2JC completed new 4 element beam and 50 Mc. gear to work Rod 2ACU (Coomamble) who has also built 6 and 144 gear—the country gang will soon be on the v.h.f.s. 2DK not very active due to shesing.

No word from any of the Inverell gang, what cooks boys? Sid 2APS not very active of late. 2OE not very active, no news from the Grafton gang. 2ARY putting out good phone, a new antenna too. 2CJ works plenty of 2Ls on 40, it is pleasing to report that 2JK's health is again 100 per cent. 2ADN working plenty of DX on 20. 2ARI Jim too busy for Ham Radio these days. 2DK working 20 only. 2APD Ken Brandford, a new Ham at Coff's, active on 20 and 40. 2AHK, late of Sydney, now on from Dorrigo 3,000 feet above sea level; Errol hopes to put up a vee beam and to get going on 144 Mc.

### COALFIELDS AND LAKES

Again not much to report and bands generally quiet. The winter seems to frighten most of the gang from their shacks. Ken 2ANU now using crystal on 144, very nice signal too. Has had the XYL in hospital, all hope she is well again. Geoff 2YU not heard so much, on 6 mainly and playing around with grid dip osc. Nothing to report from 2JZ, 2YO or 2PZ. Bob 2TY sticking to 28 Mc. had a lucky escape from a serious eye injury in a recent gale, everything OK again. Another Bob 2KF doing his best to encourage 80 to work on 20, a bit crazy there but OK on the other bands; Bob has f.b. phone these days. Max 2KZ another reliable 28 Mc. phone and despite adverse conditions still getting good contacts. Jack 2ADT mainly works 2BZ cross band 50-144, looks as if he will have to talk fast to keep 2EZ interested, the latter not so pleased with his new location. 2ADT also talks grid dip osc. and has made a multi-tester, also doing some rock grinding.

From near Wyong, Chas 2ARY is active on 40 phone, getting out well too. Major 2RU is the only active station in Gosford, on 6 mainly but can be heard working cross band 50-144 with the Way Way boys. Both Cec 2KR and John 2GA are going on 144 and 80, but not received well at the writer's QTH, but 2RU is satisfactory. 2YL playing with 144 final, altering a few antennae. Can't get yes or no to my hearing of W6FTN on 144, my logging checks OK, he was on 144, but was working cross-band to 28 Mc. and the W6 thinks a stray signal got into my 144 Mc. Rx. I am hoping 2HO's reception of a W1 on 144 Mc. receives a better fate.

### HUNTER BRANCH

Harold 2AHA who has done yeoman service as Zone Correspondent for the Branch since its inception, has now relinquished the position. All are most grateful for the wonderful work he has done. 2ASJ cannot hope to emulate his efforts, but will do my very best. Harold is giving me a lot of help, and I would like to appeal to all Hams in this Branch to let us know what they are building or wrecking so that we can pass the news on to others.

In accordance with the decision made at the May meeting, the August meeting of the Hunter Branch will be held in Maitland. This will provide an opportunity for members further up the Hunter to attend and take an active part in proceedings. It is hoped that Hams in the area who are not yet members will join up, and we are also hoping many of the younger generation will become associates. The meeting will be held at the Technical College, Maitland, on Friday, 10th August, when we will be privileged to hear a lecture by the now famous Joe Reed 2JR. This will be something new in lecturing technique, the subject being "Stabilised Oscillators." Newcastle members who have the transport, and wish to go to Maitland, please contact our Secretary 2SF (Tel. B 1874) and he will endeavour to arrange this for you. We understand 2DZ is doing good work spreading the news around the Coalfields.

State President Wal Nye made time to call on 2AHA, 2ZC, 2TF and 2XQ during a flying business trip up this way.

2XY had holidays in June, hence the bad weather. A gale wrecked 2MIU's mast, but Edgar soon got going again, and hopes to be on 20 soon. 2AAM celebrating arrival of baby daughter; congrats. Merv 2WP QRT of late. Bill shifted QTH. 2PQ has new beam, Tom active

HAMS! HAMS! IT'S HERE!

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with dual purpose 40/80 antenna. Vice President ZAPF has moved to Williamtown, and is absent on 10. 3CW is working ZLE on 40 phone despite shift work; get QRT info out of your head. Bill. Doing a fine job for Branch is 2AXM who is coaching Associates; also doing good business on RAIOs. ZPT started shack building, soon be on the air.

Thanks to ZDG for some Matland news. Keith is without mike, knocking over DX on 20 c.w., such as EK1, EA6/8. ZVO receiving help with new Rx from ZDG. VY 2AKP has new shack in yard, says it's too cold this weather. 2ANL is quiet lately, no doubt Joe will be at Matland meeting. 10 metres has been receiving attention from "Old Man" of 80. 2XG; some nice DX was result says John. ZTV was injured during recent gale, is working KBHs again. Geoff ZVI is gone QRO on 6, and QSOed ZLZ. Hunter Branch members hit v.h.f. headlines recently, and we are proud of them. 2ANU of Muscle Creek has contacted ZLY of Katoomba on 144 Mc. over very bad terrain. ZAGD has new rig on 40, f.b. signal. 2CN put in a lot of work on 20 metre beam, and watched it anxiously during the gale. 2AHA been portable from Karuah and Speer's Point; just about completed painting job. ZBZ is QTH at the moment. Dave promises to have a very long wire on 40 soon. After his success on 20 phone, 2AAI is revamping his RAIO. Old timer, ZAPF, has purchased a 7A1MD looking for modulation gen. May be his neighbours, ZAGG and 2AES will get the urge again too.

ELY active again shortly; not so QRL with "harmonic" news. 2XKG has new Rx perking up on 70 Mc., and Ken is reading mail on 40. 2NX, ZVG and ZUY have been given front page publicity in Newcastle paper; they were photographed working on ship's radar installation—the first fitted here. Nil of these three on Ham bands though. 20 DX man ZTE also absent of late. 2AWD is moving to "big smoke." ZAGY must still be QRL with new QTH, as all of Fred on air. Secretary ZSP soon be on 40 c.w. with xtal control and 807 final. ZIS Ivan pleased with new freq. meter and monitor, spending holidays making repairs. ZEV working ZLs on 40 phone and c.w. with only 5 watts. Bill also has rig on 20. Veteran 2AMM heard on 3, thanks to work and patience of ZXY. All members extend sincere sympathy to Norm 2ANA in the recent loss of his mother.

## SOUTH COAST AND SOUTHERN

Although our Sunday morning hook-up is slowly gaining in strength it does not seem to be producing the notes I had hoped to gather. However we have learned that Ross 2FN has been in hospital; understand that Ross is home again and on the way to good health. Geoff ZBQ has a new rig on 20—pair of 8346. Gordon 2OW now boasts of 63 countries on 20; his list of one month included ZN6, 6SA, XZ, LBZC, MB9B, YSIO, HSIAS, LX, UQ, and GC just to mention a few. ZEU has been down in Melbourne on holidays and usually contacts VK3 stations on Sunday mornings; on xtal at the moment, but a v.f.o. is under way. Two zone stations not heard for a long time were contacted. ZRM at Duntroon Military was not easily copied due to skip, but Jack 2OY had his usual nice signal but had no news of any interest. Don 2ASD of the south coast is on 40 and is operating from Wollongong Club Tx.

According to ZEU there is a new Ham at Corowa but no news as to call etc. Visitors this month were 2IQ who passed through town on the way back from Sydney. Cec 2ALS proudly displays new D104 mike of English origin; he is thinking of putting up a half wave for 2OW, 2AMD, 2DY, 2AKY, ZBQ are all fairly reliable contacts each Sunday morning in the zone hook-up. Les 2PI also called on his way back from West Wyalong, said his Clapp had some 4000 found some zero type condensers, so perhaps all is stable now. What with stock-taking and a spot of bitching, I have been hard put to get his batch together. The Tx will be dusted for the R.D. Contest, the only one I am interested in.

## WESTERN ZONE

Rod 2ACU is practically going on 50—Tx complete 800s in final and 50 Mc. converter is nearly finished. New Ham at Dubbo is 2APE who used an AT3/ARB, the only comment "no monkey business." ZII also of Dubbo has a new hobby gliding—so far is only in the building stage, not air borne yet. Very busy trying to get into the new home before Xmas. Freddie ZVZ far too QRL for Ham Radio. Tom 2AMR still the most active Amateur from Dubbo, heard often. ZACT Bill is doing good work with his long wire on 14 Mc. 2SS, of Lawson, quite active, has been heard on 7 Mc. John 2ANV, of Forbes, has been bitten by the carpentry bug and doing all sorts of jobs around the house.

Perhaps John has reformed or preparatory to the bug again biting. ZBT, of Burgoona, has a SCR323 nearly going on 6, works 7 Mc. occasionally.

ZEL, of Parkes, is consistent on 40 and 80, while his opposite ZIF threatens to make a comeback. On the latter score, ZNS says he has been threatening for two years. Trevor has been busy concreting around the house, painting it too. Now has his ninth sticker for the DX C.C. and 198 confirmed. Zone officer ZWH, although he supplied much of the information above, has been excused from contributing these notes as he was in Sydney for the Sheep Show. The weather was extremely wet as was the hospitality afforded by Collin 2ABD. Whether 2ABD's visit to ZWH's or vice-versa was the most pleasant remains to be proved—reactions however were similar. Hugo however has managed a few new countries since his return and admires nice QSLs from HEPLA and MPZAA. ZEX, of Springwood, is sworn off until a new frequency meter is produced. ZLZ, of Wentworth Falls, has been hitting the news on 144, chinked up an over 100 miles contact with 2ANU in Muswellbrook. ZELZ works a few skeds week-ends, but otherwise not active, will chase the DX again about Xmas.

## VICTORIA

### CENTRAL WESTERN ZONE

The main item of interest is the Zone Convention to be held at Ararat on Sunday, 16th September, commencing about 12 noon. The afternoon event—the Tx hunt on 35 Mc.—carries worthwhile prizes for the winner, three miniature tubes (6AG5s and 6AQ5s) donated by ZPD; in addition ZKU has donated a special prize for the first zone station to find the Tx, so go to it chaps and don't let other zones run off with the spoils. ZKU has also donated a prize for the best piece of Ham-built equipment on display (no revamping disposals). Winner of this section will be determined by ballot of those present. ZARI has donated a prize to be won by the winner of a brain warming competition. All in all we think a very enjoyable day will be spent by those who make the trip, so mark the date on the calendar and keep it free. A detailed programme will be included in next month's notes, and over VK3VJ. Our worthy President ZKU is back on the air again, and has been heard pounding away

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me a few secrets concerning "Pop's" XYL if she was not more respectful toward him. Quite unabashed she said that if he was not more careful she would be the one to tell him. I was a bit flustered, but you realise that you are the answer to my prayers, just tell me a teeny weeny tale about him, in fact an hourly write-up would be quite nicely, just so I can expose that cad for the caddest cad that he is, because I will never forgive him for his unkind and unkind remarks to my dear Pansy." Can I count on you Muriel? Attaguri.

The XYL of John SXK has not been enjoying the best of health at the time of writing and all hope that she is now quite OK. Just as we have been enjoying the best of health and rumour has it that Peter has been using his spare time to construct a scooper dooper radio-gram, SMS has had some good news, namely G land and John Sheard (ex-SJA), who, incidentally, hopes to be home in September, and it would appear that as Stuart has moved his gear in by the fire there will be no stopping him now.

STW is hotting up the r.f. end of his ART with an RL7 or at least that is his intention. Tom has had some trouble with his rig and has almost been converted to 2, so it's said. SCD has been playing around with a "hi-fi" amplifier and has found that a 6X4 tube and a new modulator for his 2 metre gear. SFD has almost completed his new home and as John after some time has been away, he has appeared that he will be more active than he has been lately. SKU has been heard a lot on 40, but "K" likes to play on the 20m and has been appearing on that band since the ZLA bobbed up on phone. SCJ has purchased the 322 belonging to SKB and now has a good spare 20 metre set. The 20 metre set is a standard in his main rig and is naturally quieter than usual, and it would appear that moisture was the cause of the trouble. Thanks for the notes Col, and hope the family are well.

I have been working on the front garden of the Parson's homestead all this month and as the local council brought me in to do the street, we have had quite a tussle to see just who could lean on the shovel the longest without actually falling over. I struggled manfully into the 7th year of experience told in the end, and I had to bow to a superior shovel leaver. Ross Kelly went past one day and said that he was a bit of a shoveller, and on going on that shovel, you look like a union man," much to the enjoyment of the council workers. The council sign appearing overnight on my front fence, such as "slow down, men at work," "poison sprayed here," "defour, loose surface."

The ways in which I receive information for these paragraphs are many and varied, but this month I have received a letter from the local telegram from Berri addressed to me at the best broadcasting station in the State. For obvious reasons I will not mention the name, but it went as follows: "Miracle at Berri, Sjoberg (SBL) operating on 40 metres, never thought trouble to it. Signed. The old man who lives here." Who was it Laurie?

John SBW has migrated to Broken Hill and will be found at the local broadcasting station, and will be heard with a VK2 call on the air. This unit is a good one, and he has a number of other various hobbies, and it is to be hoped that he has at last found his niche in the chemical side of life.

Federal Executive has written to the VKS Division explaining the delay in the delivery of a further batch of certificates, and from the said letter it appears that the delay was due to the fact that the rubber stamp of the signature of the newly appointed President. In sheer desperation they have now stamped the certificates with the initials of the President, and ink in less than ten minutes. Possibly someone will "whisper" this to Federal Executive some day.

SKV has been very busy erecting a tower which only wants navigation lights on it to make it visible all over Australia. Ever so often Harry can be seen perched on top of it, and only comes down when some broadcast listener tries to fasten an aerial on to it.

SMH has also erected a metal tower, although I doubt if it will be used for anything but a very shortly. The recently built 6 metre RX, after several trysts, works like a charm, although the noise level is so high that it is not so good. The trouble with some people is that they do not realise that they are such experts.

Murray Nicholson is building his Tx so as to be ready to take the air at short notice, and if all is to be believed he is doing a very credit-

able job of the wiring. No call sign as yet, but it is expected at any time.

SHC has been very inactive as far as Ham Radio goes, the reason being that he has had his car down giving it the annual overhaul. This does not bluff me however, he is only waiting for the next cycle, being that it will be well and truly in the Hughie loves contests.

In these days of rising prices and shortage of money, it is a pleasure to draw members' attention to the strange fact disclosed at a recent Council meeting, to wit, that twenty years ago the VKS Division was paying £200 per annum for its meeting rooms as against £18 per annum today. That rocks you, doesn't it.

## TASMANIA

The July meeting was well attended and the highlight of the evening was an auction sale, which was once again conducted by TLE. A quantity of old stock components procured from a local warehouse was the material under offer. This not only was an added source of revenue, but it was a pleasant surprise during the evening. A crystal pick-up secured by TLE for a few shillings proved, on checking, unserviceable, much to the disappointment of a good amateur who went along with a spare cartridge making our worthy friend happy once more. Due to the fact a number of members were unable to attend, those mainly interested in shift work, etc., the gear offered was spread over two meetings, thus enabling everyone to have a look at it.

Seen in attendance was TDW which is his first appearance since returning home, minus the famous 144 Mc. rig. He is now building a BC348 is TDW, now threatening a return to 20 and 40. Several members are intent in making tag records, those mainly interested are TAP, TAJ, TKA and TOM. Athol, as mentioned in previous notes, is still working on his unit and from every indication when asked, etc., this unit should be a pleasure to own.

Preparation for the forthcoming "R.D." Contest is well under way at TKA with a new 100 watt and believe it or not Ken is adding modulation to his rig. He is building a 20m bias 807s. A new member, although an old Ham, to be welcomed to the Institute is 7HB who is building a 20m rig. He is also expected to be heard on 40; Harold, an ex-marine operator, will use 10-20 watts for a start and will be XTal controlled. Also mentioned is a double conversion nine tube super.

Surprised to hear TAJ on 40 lately, must be a while since Athol has worked any more as he is in the States. His Yankee accent is so different that one Athol, I just could not resist it. In a letter from TAP, Charlie mentioned much hard work on the 144 Mc. rig, and he is still there, although still listens to the news each Sunday. Believe is about to purchase a rig suitable for the 144 Mc. rig. He has been making it available through the disposals section of the Institute.

The best DX for the month worked in the southern area must be credited to TKA with a "DW4" being logged, which ultimately proved to be a W4. Sorry Ken, but I will agree band conditions were absolutely terrible. In fact couldn't get on at all. Heard lately was TLJ working DX on 20 metres. Len has reached the well on the 20m band, and he is getting signals, should have no trouble in working the most elusive DX. With Txs on 10, 20, 40 and 80, TSK should prove a great asset in the contest is concerned; Max runs full power on all four bands and with one of the "cheap" AR88s, should make a good job of it. I can help. Hope all the north, and particularly the north-western gang, will be available for the forthcoming contest. Trust TKB has made full arrangements to obviate the usual circumstances which he had to make last year, and hopes to top the Tasmanian score once more.

RD having trouble with his re-build rig and vows will re-build again if things don't right themselves. Temporarily, 144 Mc. transmissions have been made, but he is still in the process of departure to the bush. Talking of bush, two country members seen in town were TLE and TAG. John was making enquiries regarding the new "750" RX, which should be coming through shortly.

In closing members are reminded that 11th August is the date for the Remembrance Day Contest, and it is the wish of the Institute to have a bigger and better participation from this Division. As the new DX book has been adopted mainly from recommendations from this State, every effort must be made so as a good score will result. The more the better, if you only can make a small score, it all adds up. Remember the thought behind it and let us make this an outstanding success.

## NORTHERN ZONE

TRK is your scribe owing to TXW being out of the June meeting saw quite a crowd at our

very comfortable rooms in the quadrant. Fortunately, or rather I should say, by design, no lecture had been arranged as we had quite a lot of business left over from previous meetings. Seems a very sound idea to leave the less important matters when a lecture is scheduled and have one night set aside for business only, to clean up the loose ends. We thrive on controversy here, so an evening's business is always uncertain.

TLZ still pruning the 144 converter and well on the road to success; was very surprised to receive a QSL this week from OXSMG, who had received the secondary, 1948, circuit in 1949. 1951; you work it out, I can't. I'm still waiting for mine. TAM on 144 consistently, but still working on the 80 Mc. rig. TSC also working the v.h.f.s. alive as well as putting out the usual signal on 7 Mc. phone, 1en's quality on the secondary, 1948, circuit is a good object lesson to some of the newer exponents of the game. THY well installed in the new QTH and getting the best of the 750 since the 7 Mc. rig.

TDZ gracing the city a few days ago, is busy sweating for exams, best of luck Bill; hope to hear and see you more often when those obstacles are cleared. TDB still busy building the new QTH and will be a mighty pleased man when he sees his name in the change of address column. TTE paid us a visit last meeting, could not find your computer, but he did provide a bit of publicity for us by writing some technical articles for "A.R." his last was entitled "The Match-Maker," and most worryingly I wondered if that was the reason he was too busy to pen these notes this month. We have quite a number of queries, but I am sure I am keen and may I be permitted to repeat what I said here some many months ago, remember the Tasmanian membership is the stepping stone to full membership, so go to it boys. Here at TRK things have been fairly quiet, temporarily gave 288 Mc. driven when I found how much the p.p. TBSB offered, so built a new b.c. set-instead.

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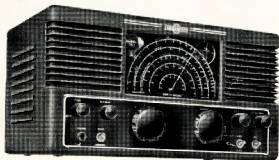
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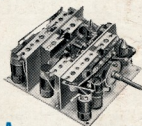
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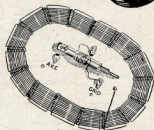


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